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| 09/480,735      | 01/10/2000  | SHINICHI KURANARI    | FUJR-16.835         | 4671             |

26304 7590 05/28/2003

KATTEN MUCHIN ZAVIS ROSENMAN  
575 MADISON AVENUE  
NEW YORK, NY 10022-2585

EXAMINER

AVELLINO, JOSEPH E

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2143

DATE MAILED: 05/28/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/480,735

Applicant(s)

KURANARI ET AL.

Examiner

Joseph E. Avellino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 May 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-8 are pending in this examination.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, 6, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art (hereinafter AAPA) in view of Ellesson et al. (USPN 6,459,682) (hereinafter Ellesson).

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4. Referring to claims 1 and 8, AAPA discloses a network interconnection apparatus for interconnecting a LAN and an ATM network to perform communications, comprising:

routing information managing means for managing routing information of the ATM network (p. 2, lines 16-24);

QoS guarantee determining means for determining based on the routing information whether or not the set QoS can be guaranteed (p. 2, lines 16-24);

QoS adjusting means for adjusting the QoS so that the QoS can be guaranteed, if it is judged that the QoS cannot be guaranteed (p. 2, lines 16-24); and

call connection control means for performing call connection according to the QoS which can be guaranteed (p. 2, lines 16-24);

AAPA does not disclose statistical information managing means for managing statistical information on traffic of the LAN and QoS setting means for setting QoS which the ATM network ought to guarantee, based on the statistical information.

Ellesson discloses:

statistical information managing means for managing statistical information on traffic of the LAN (col. 3, lines 11-21); and

QoS setting means for setting QoS which the ATM network ought to guarantee, based on the statistical information (col. 3, lines 11-21).

It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Ellesson with AAPA to react properly to short and long term fluctuations and congestion as taught by Ellesson (col. 2, lines 61-65).

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5. Referring to claim 2, AAPA in view of Elleson discloses the network interconnection apparatus as stated in the claims above. Elleson further discloses statistical information managing means manages, as the statistical information, a traffic volume which is a sum of frame sizes or a total number of frames within a fixed time interval and which reflects traffic status of the LAN, and an average traffic volume thereof (col. 5, lines 63-65; col. 11, lines 11-29). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of AAPA with Elleson to get an accurate representation of the traffic load on the LAN.

6. Referring to claim 3, AAPA in view of Elleson discloses the network interconnection apparatus as stated in the claims above. Elleson further discloses selecting a constant transmission rate as service category if a maximum traffic volume is smaller than an augmented average traffic volume, and selects a variable transmission rate as the service category if the maximum traffic volume is greater than the augmented average traffic volume (col. 5, lines 55-65). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Elleson with AAPA to alleviate bottlenecking and reduce congestion on the network.

7. Referring to claim 4, AAPA in view of Elleson discloses the network interconnection apparatus as stated in the claims above. Elleson further discloses adjusting a maximum burst size of QoS whose service category is variable transmission

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rate (paced) and whose maximum cell rate has been judged to be incapable of being guaranteed so that the QoS can be guaranteed (col. 9, line 46 to col. 10, line 30). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Ellesson with AAPA to alleviate congestion and regulate the transmission of packets over overused links.

8. Referring to claim 6, AAPA in view of Ellesson discloses the network interconnection apparatus as stated in the claims above. Ellesson further discloses route-selecting means for selecting a route according to preferential QoS if there exists a plurality of route options when the call connection is to be performed (col. 7, lines 1-15). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of AAPA with Ellesson to avoid bottlenecking of the network and reduce congestion on the links.

9. Referring to claim 7, AAPA in view of Ellesson discloses the network interconnection apparatus as stated in the claims above. Ellesson further discloses connection to a maintenance terminal unit (control server) for performing maintenance and management (col. 6, lines 27-38). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Ellesson with AAPA to maintain efficient transmission of packets throughout the network.

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Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Ellesson as applied to claim 1 above, and further in view of Ellington, Jr. et al. (USPN 6,175,569) (hereinafter Ellington).

10. AAPA in view of Ellesson discloses the network interconnection apparatus as stated in the claims above. AAPA in view of Ellesson do not disclose comprising QoS information notifying means for making notification of QoS information to outside. Ellington discloses QoS information notifying means for making notification of QoS information to outside (e.g. abstract). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Ellington with AAPA and Ellesson to allow other networks to know about the quality of service requirements of the LAN.

***Response to Amendment***

11. Applicant's arguments filed May 21, 2003 have been fully considered but they are not persuasive.

12. In the remarks, Applicant argues in substance that (1) hindsight reasoning has been used for the motivation to incorporate Ellesson with AAPA, (2) Ellesson does not teach setting QOS guarantees.

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13. As to point (1), in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, it would have been obvious to a person of ordinary skill in the art to combine AAPA with Ellesson to react properly to short and long term fluctuations and congestion as taught by Ellesson (col. 2, lines 61-65).

14. As to point (2), Ellesson states that the invention "determine their (the packet's) network priority" (abstract). This can be understood to be the QoS guarantee for the packet (i.e. the higher the network priority, the higher the service). The central server furthermore determines the rates for the different priorities of traffic. In this sense the Ellesson reference fulfills the limitations of the claim.

### ***Conclusion***

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within



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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (703) 305-7855. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (703) 308-5221. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

JEA  
May 22, 2003



DAVID WILEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100